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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/664,579	09/17/2003	Gregory Clegg Spooner	14053.41.0	3671

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MINNEAPOLIS, MN 55402

EXAMINER

CHIN, RANDALL E

ART UNIT	PAPER NUMBER
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1744

DATE MAILED: 03/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/664,579

Applicant(s)

SPOONER, GREGORY CLEGG

Examiner

Randall Chin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06 December 2005 and 03 February 2006.  
2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-15 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 06 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Specification***

1. The disclosure is objected to because of the following informalities:

On p. 6, lines 1-5, it is unclear with respect to what a “reduced diameter region” between the wheels 12 and flanges 20 is referring to (see Fig. 2). In other words, it is unclear what is actually “reduced” here with respect to the central support 26 shown in Fig. 2.

Appropriate correction is required.

### ***Claim Objections***

2. Claims 1, 5 and 15 are objected to because of the following informalities:

Claim 1, line 6, after “rotates”, it is suggested to insert --, the-- for clarity.

Claim 5, lines 2 and 3, after “blade-like”, insert --edge or-- for consistency purposes.

Claim 5, line 3, change “ob” to --of--.

Claim 15, lines 1-2, “the lower region of the housing” lacks proper antecedent basis.

Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 4-7 and 10-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaulig '025.

As well as claim 1 is understood, Kaulig '025 discloses in Fig. 2 a sweeping appliance comprising a housing which would have a dirt receiving opening, a rotary brush defining a plurality of bristles 10, a lowermost region (of the brush) touching a surface to be cleaned, wherein deflecting means 1 are arranged adjacent the brush and extending into the bristles at an angular distance which is still "behind" the point at which the bristles touch the surface to be cleaned relative to a direction of rotation, so that as the brush rotates, the bristles are held behind the deflecting means bristles are inherently held behind the deflecting means until their resilience causes them to spring back past the deflecting means (col. 2, lines 8-18) "over said surface to be cleaned." Note, the bristles are still deflected by the deflector "over said surface to be cleaned", **at least in a broad sense**. Claim 1 lacks any specificity as to what is the exact function the bristle deflection.

The provision of rollers to merely support the housing is old and well known in the sweeping device art and well within the competence of one of ordinary skill to merely add more support and improved mobility for the housing.

As for claim 4, the deflecting means 1 is a blade-like edge or member unitarily formed to the housing (col. 2, lines 8-11).

As for claim 5, the blade-like member is still disposed to engage the bristles so that they move through an angular distance of about 90 degrees (actually, the bristles of Kaulig move a continuous angular distance) as they spring past the deflecting means.

As for claim 6, the rotary brush comprises a central member 6 from which the bristles 10 radially extend (Fig. 1).

As well as claim 7 is understood, Kaulig '025 discloses a sweeping appliance in Fig. 2 comprising a housing having a forwardly facing edge and a rearwardly facing edge and which would have a dirt receiving enclosure, a dirt receiving opening being formed in the housing and leading to the dirt receiving enclosure, a lower region of the housing configured to contact the surface to be cleaned, a rotary brush 10 provided proximate the dirt receiving opening having a plurality of resilient bristles with a lower region of the brush touching a surface to be cleaned, a deflector 1 provided adjacent the brush (Fig. 2) on a forwardly-facing side thereof (merely relative) and extending rearwardly (merely relative) into the bristles at an angular distance from the point at which the bristles touch the surface to be cleaned, the deflector being configured to halt the progress of the bristles until the brush rotates sufficiently to force the bristles forward of the deflector, the resilience of the bristles causing them to spring forward of the deflector (col. 2, lines 8-18) "over the surface to be cleaned." Note, the bristles are still deflected by the deflector "over said surface to be cleaned", **at least in a broad sense**. Claim 7 lacks any specificity as to what is the exact function the bristle deflection.

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The provision of rollers to merely support the housing is old and well known in the sweeping device art and well within the competence of one of ordinary skill to merely add more support and improved mobility for the housing.

As for claims 10 and 11, the deflecting means 1 is a blade-like edge or member unitarily formed to the housing (col. 2, lines 8-11).

As for claim 12, the blade-like member is can also be joined to the housing (col. 2, lines 8-11).

As for claim 13, the blade-like member is still disposed to engage the bristles so that they move through an angular distance of about 90 degrees (actually, the bristles of Kaulig move a continuous angular distance) as they spring past the deflecting means.

As for claim 14, the rotary brush comprises a central member 6 from which the bristles 10 radially extend (Fig. 1).

5. Claims 2, 3, 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaulig '025 in view of Keller '659.

Kaulig '025 teaches all of the recited subject matter with the exception of roller means comprising a first pair of wheels and a second pair of wheels all engaging a surface to be cleaned and the rotary brush being coaxial with and connected to the first pair of wheels to rotate therewith. Keller '659 teaches a sweeping appliance comprising roller means comprising a first pair of wheels 14, 14 and a second pair of wheels 18, 18 all engaging a surface to be cleaned and a "rotary brush" 28 being coaxial with and connected to the first pair of wheels 14, 14 to rotate therewith (Figs. 1 and 2). It would

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have been obvious to one of ordinary skill to have provided Kaulig's appliance with roller means comprising a first pair of wheels and a second pair of wheels all engaging a surface to be cleaned and the rotary brush being coaxial with and connected to the first pair of wheels to rotate therewith as taught by Keller '659 to add mobility and stability to the sweeping appliance.

6. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kaulig '025 in view of Worwag '939.

Kaulig '025 teaches all of the recited subject matter with the exception of a lower region of the housing bent downward to form a ramp. Worwag '939 teaches a lower region of a housing bent downward to form a ramp 30 (Fig. 2). It would have been obvious to one of ordinary skill to have provided Kaulig's sweeping appliance with a ramp bent downwards as taught by Worwag to facilitate the sweeping up of debris.

### ***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Randall Chin whose telephone number is (571) 272-1270. The examiner can normally be reached on Monday through Thursday and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gladys Corcoran can be reached on (571) 272-1214. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Randall Chin

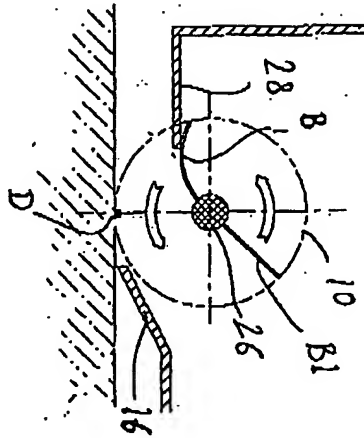
**RANDALL E. CHIN**  
PRIMARY EXAMINER



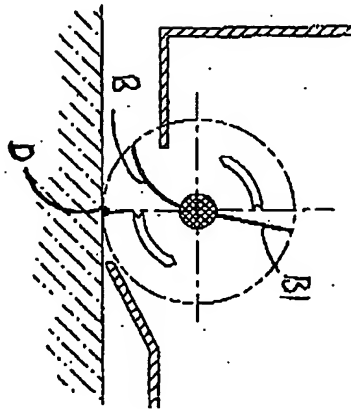


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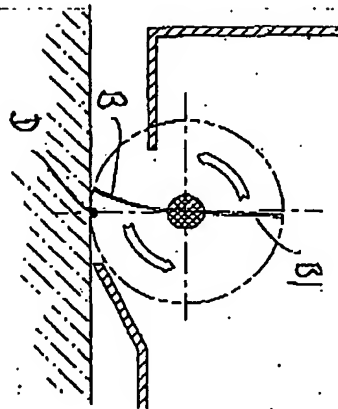
Fig.3 (a)



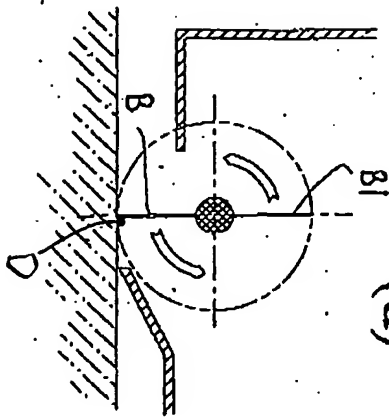
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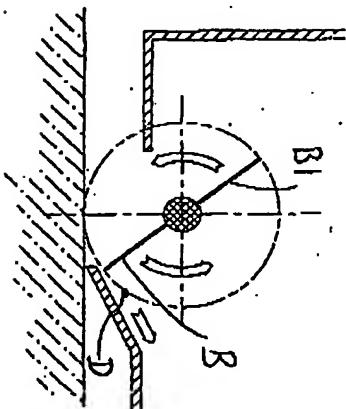
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